## VI. ABSTRACT

A method of detecting oxidants in a biological sample comprising: adding a source of ferrous ions to said sample, whereby the presence of oxidants in said sample oxidize at least a portion of said ferrous ions to ferric ions; adding a chromogenic compound to said sample, whereby said chromogenic compound reacts with at least a portion of any ferric ions present in said sample; and detecting for the product of said chromogenic compound-ferric ion reaction; whereby the detection of said chromogenic compound-ferric ion reaction product indicates the presence of oxidants in said sample. The method of detecting adulteration of a urine sample also comprises adding a source of ferrous ions to a urine sample; adding a chromogenic compound to said urine sample; detecting the presence or absence of a chromogenic reaction product; determining a concentration of said chromogenic reaction product; and determining if said concentration signifies adulteration of said urine sample.